# Components of an Outdoor Lighting Ordinance

Source: Template from DarkSky International

## Background

#### Objective

 Provide a template of outdoor lighting requirements for any county seeking to implement a responsible outdoor lighting ordinance

#### Content

- Specifies requirements that work together to meet the 'Five Principles for Responsible Outdoor Lighting' coauthored by DarkSky International and the Illuminating Engineering Society
- Allows tailoring to reflect local situations
- Includes narratives explaining why a topic is being addressed as well as optional requirements or choices

#### Five Principles for Responsible Outdoor Lighting

- Useful
  - Use light only if it is needed
- Targeted
  - Direct light so it falls only where it is needed
- Light Levels
  - Light should be no brighter than necessary
- Controlled
  - Use light only when it is needed
- Warm-Colored
  - Use warmer colored lights where possible

## Purposes of the Ordinance

- Protect the health and welfare of all residents
- Enhance the character and quality of life
- Prevent inappropriate or poorly installed lighting
- Reduce lighting conflicts between property owners
- Preserve the naturally dark sky for the benefit of residents, visitors, wildlife, and the environment

## **Applicability**

- All sources of outdoor lighting installed or replaced within the jurisdiction
  - Newly permitted development and construction projects involving dwellings, roadways, public right-of-way, buildings, facilities, properties, landscapes, parking lots, hardscapes, non-habitable structures, and monuments
- Existing outdoor lighting lawfully installed prior to the adoption date of the ordinance that does not meet the requirements is considered legal and repairable but non-conforming. All non-conforming lighting may continue to be used until one of the following occurs:
  - Light constitutes a public safety hazard or is a nuisance
  - When a property is re-zoned for a new land use

#### Exemptions

- Lawful: Lighting mandated by a legal jurisdiction with broader authority than the county
  - FAA, DoT, OSHA
- Safety: Lighting installed for public safety
- Historic: Lighting replicating historical character and lighting effect protected by historical registration
- Permitted: Temporary lighting approved by permit for special events, festivals, and community benefit, provided the permitted lighting still meets light trespass requirements
- Seasonal: Lighting used during specific times of year

#### **Prohibitions**

- Lighting must not interfere with the safe movement of motor vehicles
  - Any lighting that distracts or disables the vision of a motor vehicle operator (e.g., excessively bright or rapid blinking, flashing, and/or motion video) or contributes to traffic control confusion (e.g., sources resembling or imitating traffic or railroad signals) is prohibited
- Beacons and searchlights, except for emergency use by authorized first responders

### **Definitions**

Provides definitions to key terms used in the ordinance

## **General Performance Requirements**

- Legal: All outdoor lighting installations shall comply with federal and state law; county codes; applicable energy and building codes; product safety labeling; the requirements of this ordinance
- <u>Light Level</u>: Lighting installed for outdoor use shall not exceed 125% of the light level recommended by the applicable standard
- <u>Distribution</u>: Light fixtures emitting more than 1000 lumens shall be fully shielded and shall emit no more than 5% of their total light output above 80 degrees from nadir

## **General Performance Requirements**

- Trespass: Light trespass onto residential use property shall measure no greater than 1 lux (0.1 fc)
- <u>Curfew</u>: Non-essential outdoor lighting, including but not limited to landscape and decorative lighting elements, shall be dimmed or extinguished during night time hours
- Controls: Lighting activated by motion detection shall automatically turn off or return to their dimmed state no more than 15 minutes after activity is no longer detected
- Spectrum: The maximum allowable correlated color temperature (CCT) is 3000K (2700K is preferred) unless a public safety need is documented

### Case-Specific Requirements

#### Residential Use

- Includes a table of per-dwelling lumen allowance as a function of effective property size and declared lighting zone
- Directed at multi-family units, apartment buildings

#### Non-Residential Use

- Increases lumen exemption limit from 1000 to 3000 lumens
- Increases allowed light trespass from 1 lux to 3 lux

#### Sports Lighting

- Relaxes various general performance requirements

## Administrative Requirements

#### Permit Application

- Submittal: Whenever a building permit is applied for, an outdoor lighting plan must be submitted along with a compliance statement
- Review: Lighting plan and compliance statement shall be subject to review & approval by the zoning administrator

#### Enforcement

- **Enforcement:** Zoning administrator shall be responsible to implement, administer, and enforce this ordinance, including investigations of alleged violation
- <u>Penalty</u>: Any property owner not meeting the requirements of this ordinance shall be in violation and shall be issued a notice and administrative citation as provided by the municipal code

## For Existing Lights....

- RLEP offers free outdoor lighting replacement (Call 703-250-7943)
- REC offers free upgrade of older-style leased pole lights (Call 540-727-2168)







